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ORIGINAL CL BY 235979  
☐ DECL ☒ REVW ON 2010  
 EXT BYND 6 YRS BY SAMC  
 REASON 3 & (3)

PROGRESS REPORT  
 FOR  
 MONTH OF SEPTEMBER 1959

DDG <u>25</u>	REV DATE <u>30 APR 1960</u>	BY <u>08313</u>
ORIG COMP <u>33</u>	OPI <u>56</u>	TYPE <u>03</u>
ORIG CLASS <u>11</u>	PAGES <u>1</u>	REV CLASS <u>C</u>
JUST <u>22</u>	NEXT REV <u>2010</u>	AUTH: HR 10-2

BROADBAND ANTENNA, FILTER AND DETECTOR SYSTEMS

Purpose: To develop a system of antennas, filters and detectors for the  
 50 MC to 40,000 MC frequency range.

Personnel: Electrical Engineers:

25X1

Mathematician:

25X1

Status: Investigation of the filter network has continued. Owing to  
 the skirt selectivity requirements, the insertion power ratio  
 function is a high order polynomial. The math analysis group  
 is using the IBM 650 computer to determine the characteristics  
 of the network function.

Two Sage Laboratories, Inc. waveguide crystal holders were  
 received. Government furnished signal generators (12.4 KMC to  
 39.7 KMC) were delivered.

Future Plans: The filter design will continue and as early as possible a test  
 model using strip transmission line techniques will be constructed.  
 Pending delivery of the customer furnished video amplifier sensi-  
 tivity measurements will be made on the two crystal holders with  
 Sylvania type 1N358A tripolar crystals mounted in them.

Work will continue on the 500 MC to 10,000 MC antenna.

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